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ABSTRACT

A study compared mothers' and fathers' speech patterns when speaking to preschool children, particularly utterance length, sentence types, and word frequencies. All of the children attended a nursery school with a student population of 136 in a large urban area in the Southwest. Volunteer subjects, 28 mothers and 28 fathers of 28 children who ranged in age from two years eight months to three years five months, were video and audio taped as they played with their children in a playroom before having an individual conference with the child's teacher. Both the mother and the father were observed when alone with the child. Analysis of the tapes suggested that parents modify their language in similar ways in order to accommodate their preschool children, although their communication patterns appear to vary in the areas of sentence types and word frequencies. Fathers used significantly more interrogative sentences, while mothers used significantly more declarative sentences. More research is needed to clarify the ways in which parents modify their language for their children and to take into account the sex of the child, the educational level of the parents, and the socioeconomic differences among parents. (DF)

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A COMPARISON OF FATHER'S AND MOTHERS' SPEECH PATTERNS WHEN COMMUNICATING WITH THREE, FOUR, AND FIVE-YEAR-OLD-CHILDREN

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Much research in children's language development has concentrated on the role of input language in language acquisition. Most of these investigations have concentrated on the input speech of mothers to children (Broen, 1972; Phillips, 1970; Drach, 1969,; Cazden, 1972; Brown and Bellugi, 1964; Snow, 1971, 1976, 1977). There has been only a very limited amount of research in which the role of the father's input language in the development of children's communicative competence has been studied. Recently, however, a few investigators have begun to examine the effects of fathers' communication with their children. The results of these investigations have shown that while fathers may have only a limited amount of time to spend with their children, it appears that even a limited amount of time spent in interaction can have far reaching effects on the child and that important inter-personal dynamics reside in father-child communications (Friedlander, 1972; Kotelchuck, 1976; and Snow, Jacklin, Maccoby, 1983). Several studies have shown that there is much similarity between fathers' and mothers' input language. Studies by Golinkoff and Ames (1979), and Katsh (1980) found that fathers who spend fewer hours at home than mothers adjust their speech to their children much like mothers do, and that both mothers and fathers adjust their length of utterance and the concreteness and diversity of their vocabulary relative to the age and production skill of the child. Hummel (1980) studied the speech register addressed to

children and indicated that fathers and mothers are similar with respect to the speech addressed to their children, and in a study of a single father, Giattino and Hogan (1975) found that the father shortened the length of utterance when addressing his child and that his speech seemed to be influenced by the needs of his child and by the feedback from her.

Other investigators have found significant contrasts between fathers' and mothers' interactive styles with children and in the amounts and kinds of lexical information they provided and elicited. Weinraub and Hogan (1978) found that while both mothers' and fathers' speech is grammatically complete, relatively free from dysfluency and syntactically simple, he also noted that mothers' speech was syntactically more complex while fathers' speech was lexically more complex. The speech of fathers and mothers in a game-playing situation was investigated by McLauglin, Schuta, and White (1980). The results of this investigation showed that fathers used more directly controlling language, i.e. imperatives or direct suggestions, than did mothers; whereas mothers preferred indirectly rather than directly controlling language. Masur and Gleason (1980) investigated play interactions of parents with pre-school aged children and found that fathers provided and elicited significantly more information than mothers. More fathers than mothers requested labels and functions, indicating that fathers were more cognitively and linguistically demanding, and in this study children directed more total vocabulary to fathers than to

mothers. Parke and O'Leary (1975) found that fathers generally provided a more stimulating, diversified, challenging and more didactic speech environment than mothers. In a 1977 study, Poler found that in interactions when both the father and mother were present, the fathers tended to dominate the language interchanges, made less use of expansions, and appeared less conversational than mothers. Gleason (1975) reported that fathers used more imperatives than mothers when addressing their children. However, in another study done by Fash and Madison (1981), the results indicated that mothers and fathers were similar in their mean length of response, communicative dominance, use of expansion, and differed significantly only in their use of self repetition and references to the past.

Further investigation in the area of father-child language interaction is necessary to more clearly establish the father's role in language development. The purpose of this study was to analyze the speech of mothers and fathers as they interacted with their children in a similar setting. Specifically, the investigation compared mothers' and fathers' speech patterns when speaking to pre school children with regard to utterance length, sentence types, and word frequencies.

PROCEDURE

The subjects for this study were the 28 fathers and 28 mothers of 28 nursery school age children. The children, 16 girls and 12 boys, ranged in age from two years eight months to

three years five months with a mean age of three years and one month. All of the children attended a nursery school with a student population of 136 in a large urban area in the Southwest. Fathers participating in this study ranged in age from 23 to 40 years with a mean age of 29.2 years. Mothers participating in this study ranged in age from 20 to 36 years of age with a mean age of 26.4 years. The educational level of the parents was varied. Sixteen of the fathers had attended or graduated from college, while twelve of the mothers had attended or graduated from college. No attempt was made to obtain data about socio-economic levels.

The speech samples were obtained from audio and video tape recordings of spontaneous conversations between parents and children for approximately 20 minutes as they waited in a playroom before having a conference with the child's teacher. Because the teacher met with each parent individually, both the mother and the father were observed when alone with the child. This procedure resulted in 56 tapes of approximately 20 minutes of conversation.

All of the parents had volunteered to be part of the study. They knew that they were being video taped with a stationary camera attached to the wall. However, because no monitor was used, they could not see a video picture. The parents had been told that the researchers were interested in their child's language development and play habits. Therefore, one of the limitations of the study is that the language of parents in this

controlled situation may be different from the language they would use in an uncontrolled situation.

RESULTS

All of the transcriptions and analyses of the language were done by two professors of education and two graduate students in education. After the parent-child conversations were transcribed, the mean length of utterance was calculated for each parent. Contractions were counted as two words and hyphenated words such as "good-bye" were counted as one. Also words such as "gonna" and "wanna" were counted as two words, and word repetitions were included in the calculations.

The results showed that both fathers and mothers used a shortened utterance length when speaking to young children as compared to the expected adult utterance length of 8 to 13 words (Phillips, 1973). The mean length of utterance for fathers ranged from 3.56 to 5.94 with a mean of 4.59 and a standard deviation of 1.31; while the mean length of utterance for mothers ranged from 3.59 to 6.15 with a mean of 4.29 and a standard deviation of 1.26. Statistical analysis indicated no significant difference between fathers and mothers on this index of language complexity.

The speech samples of both mothers and fathers were then analyzed as to sentence types. Sentence types used in the classification were (1) interrogatives--utterances which indicated that certain information was being requested; (2) declaratives--utterances which were used to make a statement;

and (3) imperatives--utterances which were used to command or direct behavior. Any sentence which could not be classified under these sentence types was not analyzed.

The results of this analysis showed that the mean percentage of declarative sentences used by fathers was 38.15 per cent with a standard deviation of 8.6, and the mean percentage of declarative sentences used by mothers was 47.28 per cent with a standard deviation of 7.1. When the use of interrogative sentences used by fathers was 47.78 per cent with a standard deviation of 9.1, and the mean percent age of interrogative sentences used by mothers was 39.75 per cent with a standard deviation of 7.6. The mean percentage of imperative sentences used by fathers was 9.11 per cent with a standard deviation of 1.3, and the mean percentage of imperative sentences used by mothers was 7.89 per cent with a standard deviation of .9. Thus, for fathers the most widely used sentence was the interrogative sentence, followed in order by declaratives and imperatives. For mothers, the most widely used sentence was the declarative sentence followed in order by interrogatives and imperatives. Statistical analysis of the data showed that fathers used significantly more interrogative sentences than mothers ($df = 27$, $t = 3.42$, .01 level), and that mothers used significantly more declarative sentences than fathers ($df = 27$, $t = 2.9$, .01 level). No significant differences between mothers and fathers were found in the use of imperative sentences ($df = .27$, $t + 1.3$). The mean percentages and standard deviations for

sentence types for fathers and mothers are shown in Table 1.

Table 1

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Mean Percentages and Standard Deviations for Sentence Types

	Father		Mother	
	Mean	S. D.	Mean	S. D.
Sentence Type				
Declarative	38.15	8.6	47.28	7.1
Interrogative*	47.78	9.1	39.75	7.6
Imperative*	9.11	1.3	7.89	.9

*Significant Difference

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The speech samples were also analyzed according to the frequency of the words used by fathers and mothers. The rank list of word frequencies found in the Computational Analysis of Present-Day American English (1967) by Kucera and Francis was used as the source for the word frequencies. The first 1500 words on the Kucera-Francis list were operation defined as high frequency words, and any word not appearing on this list was considered a low frequency word and counted as such in the analysis.

The word frequency count showed that the mean percentage of low frequency words used by the fathers was 4.3 per cent with a standard deviation of .92, and the mean percentage of low frequency words used by mothers was 2.4 per cent with a standard deviation of .74, which was a significant difference (df = 27, t = 9.0, .001). Also, in the analysis of word frequencies, it was noted that when a father used infrequent words such as "construction site", "pride", or "valued customer", the child would often repeat the father's words immediately. The mean and standard deviation for the utterance length and the mean and standard deviation for the percentage of low frequency words for both mothers and fathers are compared in Table 2.

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Table 2

Means and Standard Deviations for Utterance Length and Percentage of Low Frequency Words for Fathers and Mothers

	Fathers		Mothers	
	Mean	S. D.	Mean	S.D.
Utterance Length	4.59	1.31	4.29	1.26
*Low Frequency Words	4.3	.92	2.4	.74

*Significant at .01 level

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DISCUSSION

The results of this study of parental language directed to young children show several similarities in the language modifications that parents make when speaking to young children. Both mothers and fathers shorten the mean length of utterance in order to accommodate the language needs of their young children. The results obtained from the analysis of the mean length of utterance are consistent with the results obtained from the previous studies by Poler (1977) and Fash and Madison (1981).

However, significant differences were found in the types of sentences which fathers and mothers used when speaking to their children. Fathers used significantly more interrogative sentences than mothers and mothers used significantly more declarative sentences than fathers. Both parents used few imperative sentences. This finding agrees with the finding reported by Masur and Gleason (1980) which showed that fathers requested more labels and functions and generally were more linguistically demanding towards children than were mothers. It does not agree, however, with the Gleason (1975) study which found that fathers used more imperatives than mothers when addressing their children.

The finding that fathers use significantly more words of lower frequency than mothers also verifies the finding by Parke and O'Leary (1975) that fathers generally provide a more stimulating, diversified, and challenging speech environment than mothers. It also agrees with Weinraub's (1978) study which

reported that father's speech was more lexically complex than mothers' speech, and with the study done by Masur and Gleason (1980) who found that fathers provided and elicited significantly more information than mothers.

A major limitation of the study was that it was done under laboratory conditions which might have changed the natural langauge pattern of the parents. Another limitation of the study is that no differentiation was made in regard to the sex of the child in the analysis of the parental speech patterns. Some recent research has shown that the parental speech patterns are affected by the sex of the child, and the predominance of girls in the sample may have influenced the results of the study. In future studies, care needs to be taken to control for the effect of the child's sex on the speech patterns of parents.

Another limitation of the study was that the parental speech was studied only when the child was alone with either parent. It could be that the presence of the other parent has a marked influence on the speech of either the mothers or fathers when communicating to their young children. Thus further research which controls for these variables is needed before the complex speech patterns of parents speaking to young children will be understood.

Conclusion

The results of this study seem to indicate that parents do modify their language in similar ways in order to accommodate

their pre school children in similar ways. However, their communication patterns appear to vary in the areas of sentence types and word frequencies. More research is needed to clarify the ways in which parents modify their language for their children. This research needs to take into account the sex of the child, the educational level of the parents, and socio-economic differences among parents.

REFERENCES

Broen, P. A. The verbal environment of the langauge-learning child. Monograph of the American Speech and Hearing Association, 1972.

Brown, R. and Bellugi, U. Three processes in the child's acquisition of syntax. In E. H. Lenneberg (Ed.), New Directions in the Study of Language. Cambridge, Mass.: M.I.T. Press, 1964.

Clarke-Stewart, K.A. And daddy makes three: The father's impact on mother and young child. Child Development, 1978, 49, 466-478.

Cazden, C. B. Child Language and Education. New York: Holt Rinehart, and Winston, Inc., 1972.

Drach, K. The langauge of the parent. Working paper # 14, Language-behavior Research Laboratory. Berkeley, Ca.: University of California Press, 1969.

Fash, D. S. and Madison, C.L. Parent's langauge interaction with young children: A comparative study of mothers' and fathers'. Child Study Journal, 1981, 11, 137-153.

Friedlander, B. The effect of speaker identity, voice inflection, vocabulary, and message on infants' selection of vocal reinforcement. Journal of Experimental Child Psychology, 1972, 6, 443-459.

Giattino, J. and Hogan, J. G. Analysis of a father's speech to his language-learning child. Journal of Speech and Hearing Disorders, 1975, 40, 524-537.

Gleason, J. B. Fathers and other strangers: Men's speech to young children. In D. P. Dato (Ed.), Language and Linguistics, Washington, D. C.: Georgetown University Press, 1975.

Golinkoff, R.A. and Ames, G. J. A comparison of fathers' and mothers' speech with their young children. Child Development, 1979, 50, 28-32.

Kotelchuck, M. The infant's relationship to the father: experimental evidence. in M. Lamb (Ed.), The Role of the Father in Child Development. New York: John Wiley, 1976.

Kucera, H. and Francis, W. N. Computational Analysis of Present-Day American English. Providence, R. I.: Brown University Press, 1967.

Masur, E. F. and Gleason, J. B. Parent child interaction and the acquisition of lexical information during play. Developmental Psychology, 1980, 16, 404-409.

McLaughlin, B., Shatz, C. and White, D. Parental speech to five-year-old children in a game playing situation. Child Development, 1980, 51.

Parke, R. D. and O'Leary, S. O. Father-mother-infant interaction in the new-born period. In K. F. Riegel and J. A. Meacham, (Eds.), The Developing Individual in a Changing World. Chicago: Aldine Publishing Co., 1975.

Phillips, J. R. Formal characteristics of speech which mothers address to their young children. Unpublished doctoral dissertation. Johns Hopkins University, 1970.

Phillips, J. R. Syntax and vocabulary of mothers' speech to young children: Age and sex comparisons. Child Development, 1973, 44, 182-185.

Poler, L. K. Fathers' speech to language learning children. Unpublished master's project, Washington State Univ., 1977.

Snow, C. E. Mother's speech to children learning language. Child Development, 1972, 43, 549-565.

Snow, C. E. Mother's speech research from input to interaction. In Snow and Ferguson (Eds.), Talking to Children, Language Input and Interaction. Cambridge: Cambridge University Press, 1971, 31-51.

Snow, M., Jacklin, C.A., and Maccoby, E.E. Sex of child differences in father-child interaction at one year of age. Child Development, 1983, 54, 227-232.

Weinraub, M. and Frankel, J. Sex differences in parent-infant interaction during free play, departure, and separation. Child Development, 1977, 48, 1240-1249.